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Department of
Agriculture

Forest
Service

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File Code: 3420
Route To:

Date: October 15, 2002

Subject: Spruce Beetle Activity, Pinaleno Mts., Safford RD, Coronado NF

To: District Ranger, Safford RD

On September 19, 2002, Steve McKelvey and I evaluated bark beetle activity within the recreation, administrative, and summer home sites on the Pinaleno Mountains. This letter summarizes survey results and observations regarding bark beetle activity in these areas. We provide a background of past treatments, a description of the current situation, and a discussion of possible future actions.

Background. Spruce beetle (*Dendroctonus rufipennis*) populations have increased over the past several years on the Pinaleno Mountains following spruce defoliation and snow-caused damage in the 1990's. Beetle activity was observed in and adjacent to several recreation, administrative, and summer home sites in 2000. An integrated pest management approach was adopted; and in 2001, approximately 244 beetle-infested spruce were removed from these sites (Table 1). Stumps from infested trees were burned to kill spruce beetle that would otherwise emerge and attack adjacent green spruce. Lindgren funnel traps with a spruce beetle lure have been used to monitor beetle flight periodicity and give a rough estimate of population levels in these areas.

Table 1. Infested spruce removed in 2001 and 2002 on the Pinaleno Mountains.

<u>Recreation Site</u>	<u># of Infested Spruce Removed</u>	<u># of New Infested Spruce</u>
	2001	2002
Shannon C.G.	56	12
Hospital Flat C.G.	93	6
Solider Creek C.G.	37	48
Old Columbine Admin. Site	8	2
Columbine Summer Homes	<u>50</u>	<u>6</u>
TOTAL	244	74

Current situation. This September, approximately 2,500 spruce were examined for signs of beetle attack during a 100 percent survey of spruce within and adjacent to the above-mentioned recreation sites. Spruce beetle-related tree mortality has decreased in all previously treated recreation sites except Solider Creek campground. The increased activity at Solider Creek may be attributed in part to the high densities and larger diameters of spruce within this area. Many of the currently infested spruce examined were lightly attacked. In addition, very few spruce beetles were caught in the funnel traps used to monitor populations, which may be an indication of a decreasing beetle population in these areas. All infested trees were marked with yellow flagging.



Future Action. Past treatments appear to be reducing additional spruce mortality within these recreational, administrative, and summer home sites. Continued sanitation efforts are needed to further minimize additional tree losses. The 74 infested spruce identified during this site visit should be felled and removed from the site or beetles destroyed by peeling off the bark. If possible, infested trees should be treated this fall because of the increased possibility of a one-year life cycle this year.

Funds may be available from Forest Health Protection for the removal of infested spruce within these types of sites through the forest health prevention and suppression program. Our office is available to conduct similar surveys, as discussed here, to identify any additional attacks after the 2003 spring beetle flight. Request for prevention and suppression funds should be into the Regional Office no later than October 23th, 2002. If you have any questions regarding this assessment please let us know. I can be reached at (928)556-2073 or you can also contact Joel McMillin at (928) 556-2074.

/s/ John Anhold
JOHN ANHOLD
Arizona Zone Leader Forest Health

cc: Dick Streeper, Robert Lefevre, Randall A Smith, Joel McMillin, Debra Allen-Reid, Leonard Lucero